PRELIMINARY NOTE:

Our rechargeable lithium-ion batteries are neither "substances" nor "mixtures" in the sense of the REACH regulation (EC) 1907/2006, instead they are to be considered "articles". The intended release of substances during use is not intended. Therefore, there is no obligation to provide a safety data sheet according to Article 31 of the REACH Regulation.

Valid for the following rechargeable lithium-ion batteries from fischer:

no.	fischer art.-no.	Nominal voltage (V)	Nominal power (Ah)	Max. capacity (Wh)	Used in impact wrenches batterie charger fischer art.-no.
1	174187	18	4	72	552922
	552930				552923
					552924
					552925
					552926
					552927
					552929
					552931
no.	fischer art.-no.	Nominal voltage (V)	Nominal power (Ah)	Max. capacity (Wh)	Used in dispenser fischer art.-no.
2	543946	7,2	1,5	10,8	543629
					544076
	563787	18	2	36	558955
	189572	18	2	36	566439
					564960
					562004
					564961
no.	fischer art.-no.	Nominal voltage (V)	Nominal power (Ah)	Max. capacity (Wh)	Used in setting tool fischer art.-no.
3	553415	7,2	2,5 / 3,0	18 / 21,6	553411
	176763	7,2	2,5 / 3,0	18 / 21,6	553585
					553586
					553587
					560038
					560091
					560040
					560041
					560042
					560043
					564046
					564047
					568742
					567397
	568511	18	4,0	72	567478
					571026
no.	fischer art.-no.	Nominal voltage (V)	Nominal power (Ah)	Max. capacity (Wh)	Used in setting tool fischer art.-no.
4	568511	18	4,0	72	567478
	206164	18	4,0	72	571026

no.	fischer art.-no.	Nominal voltage (V)	Nominal power (Ah)	Max. capacity (Wh)	Used in riveting tool fischer art.-no.
5	802538	14,4	2,6	37,44	802522
					802610
					804097
no.	fischer art.-no.	Nominal voltage (V)	Nominal power (Ah)	Max. capacity (Wh)	Merchandise article
6	553474	5	2,6	13	Concrete powerbank

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identification

Trade name — Rechargeable lithium-ion batteries

1.2 Relevant identified uses of the products and uses advised against

Relevant identified uses — Energy source in the corresponding fischer device

Recommended restrictions on use — None if used as intended

1.3 Details of the supplier providing the safety information

Company name

fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße 1
D-72178 Waldachtal
Phone: +49(0)7443 12-0
Fax: +49(0)7443 12-4222
Email: info-sdb@fischer.de
Internet: www.fischer.de

Placer on the market

fischer Deutschland Vertriebs GmbH
Klaus-Fischer-Straße 1
D-72178 Waldachtal
Phone: +49(0)7443 12-6000
Fax: +49(0)7443 12-4500
Email: info@fischer.de
Internet: www.fischer.de

1.4 Emergency number

Emergency telephone number — +49(0)6132-84463 (24h)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Cells in lithium-ion batteries are sealed gas-tight and are harmless if handled properly, provided that the manufacturer's instructions are observed during use. In normal use and for the intended purpose according to the manufacturer's instructions, there is neither a risk of ignition or explosion nor a risk of leaking ingredients.

According to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP), the products are not classified as hazardous to health or the environment.

2.2 Labelling elements

The product is not subject to mandatory labelling under Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

2.3 Other hazards

Incorrect handling or circumstances leading to improper operation may result in leaks and leakage of ingredients and decomposition products. This can lead to strong reactions that endanger health and the environment.

Protect batteries from moisture, such as rain or splashing water, and do not immerse them in liquids, such as water. Contact with liquids may cause heat, smoke, ignition or explosion of the battery after hours or days.

Do not use chargers for rechargeable batteries that are not suitable for this type of battery.

The limits for the maximum current load, the final charging and discharging voltages must be strictly observed.

Do not short-circuit. Do not damage mechanically (puncture, deform, disassemble, etc.).

The batteries must not be modified or manipulated under any circumstances, as this can lead to considerable safety risks.

In contact with conspicuous batteries (leakage of contents, deformation, discoloration, dents, etc.), adequate body and respiratory protection is required.

Do not heat or burn above the permissible temperature. Batteries can react very strongly, e.g. in combination with fire. Battery components can emit considerable energy.

In case of fire, corrosive vapors may be released.

In case of improper use, in combination with electrical load, fire or mechanical shocks, a pressure relief opening opens. In the event of a fault, the battery casing can break and the contents are released.

Short circuits can be caused by bridging the battery contacts with metal objects such as screws, nails, paper clips, keys or other electrically conductive objects. Short circuits can cause burns or fires. Discharged batteries can also cause short circuits, as they still have a residual charge to protect them from total discharge. To prevent accidental and unintentional

short circuits, insulate battery contacts of batteries outside the machine with protective caps from the scope of delivery or with adhesive tape.

Keep batteries away from small children.

2.4 Test summary

	fischer-Art.-Nr.174187 Nr. 552930	fischer-Art.-Nr.543946	fischer-Art.-Nr.176763 Nr.553415	fischer-Art.-Nr.802538	fischer-Art.-Nr.553474
Name of placer on the market	see section 1.3	see section 1.3	see section 1.3	see section 1.3	see section 1.3
Contact data of placer on the market	see section 1.3	see section 1.3	see section 1.3	see section 1.3	see section 1.3
Name of test laboratory	Sanyo Component Europe GmbH, Technical CRM Section	TÜV Rheinland Taiwan Ltd., Taichung Branch	STL Technology Co., Ltd.	Battery university GmbH	Pony Testing International Group Co. Ltd.
Contact data of test laboratory	Stahlgruberring 4, 81829 München, Germany	No. 9, Ln. 36, Sec. 3, Minsheng Road, Daya District, Taichung City 428, Taiwan Chinese Taipei	No.l, West 15th St., K.E.P.Z., Kaohsiung City 806, Taiwan, R.O.C.	Am Sportplatz 30, 63791 Karlstein, Germany	Building 1, No.66 Jindai Road, Zhongguancun Environmental Protection Park, Haidian District, Beijing, China
Phone	+49 89 460095-0	+886 4 2521 8888	+886-7-841-1501	+49 (0} 6188-99410-0	400-819-5688
Website	www.sanyo-energy-europe.com	http://www.twn.tuv.com/	www.stl-tech.com	www.bu-lab-eu	www.ponytest.com
E-mail	info.europe@sanyo-energy.com	nicht verfügbar	stl@stl-tech.com	mail@bu-lab.eu	pony@ponytest.com
ID test report	28248081 001	50214507 001	STL1802007	BU-2017-05447-1-B1	MLTDB\1/VUXXXX
Date test report	09.11.2018	29.01.2019	22.03.2018	18.12.2017	15.03.2017
Cell type	Li-Ion				
Mass	648 g	115 g	192 g	522 g	46,5 g
Watthours (Wh)	72	10,8	18	37,44	13
Description	Lithium-ion battery	Lithium-ion battery	Lithium-ion battery	Lithium-ion battery	Lithium-ion battery
Model	Li-Power 625591000	LI215	PBP2A66Dl PBP2A66D2	4S2P ICR18650 HA 1	GZNS18650-2600
Test UN 38.3.3 a-e, h passed	yes	yes	yes	yes	yes
Tests UN 38.3.3 f-g passed	not applicable	not applicable	not applicable	not applicable	not applicable

The basis is the UN Recommendations on the transport of dangerous goods, Manual of tests and criteria, ST/SG/AC.10/11/Rev. 6/Amendment 1.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances	not applicable
3.2 Mixtures	Rechargeable lithium-ion battery pack. Under normal operating conditions, contact with the ingredients is excluded**.**

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

The lithium-ion batteries contain an organic electrolyte. If this leaks out of the battery pack and contact has been made, the following measures must be taken:

In case of skin or eye contact with escaping substances (electrolyte)
In case of skin or eye contact, the affected areas must be rinsed thoroughly with water for at least 15 minutes. In case of eye contact, a doctor must be contacted in any case.

In case of burns
In case of burns, appropriate treatment is necessary. It is strongly recommended to contact a doctor.

In case of inhalation
Move affected person to fresh air, use artificial respiration if necessary. Consult a doctor if the respiratory tract is irritated. Leave the room immediately in case of intense smoke or gas release. Provide adequate ventilation if possible.

If swallowed
First rinse out mouth with plenty of water and then drink plenty of water. Do not induce vomiting. Seek medical attention immediately.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Extinguishing agent (suitable)	Carbon dioxide (CO_2), extinguishing powder, foam, water spray jet
Extinguishing agent (unsuitable)	Full water jet

Fires of lithium-ion batteries can always be fought with a water spray. No special extinguishing agents are required. The cooling effect of water inhibits the spread of a fire to battery cells that have not yet reached the critical temperature ("thermal runaway") for ignition.

5.2 Special hazards arising from the substance or mixture

Sp. hazard of the substance, combustion products or produced gases	Heating or fire may release toxic gases, which can cause health damages when inhaled

5.3 Instructions for fire fighting

Protective equipment	Do not inhale explosion and combustion gases. Use self-contained breathing apparatus.
Other information on firefighting	Fire residues and contaminated extinguishing water must be disposed of in accordance with local regulations. Cool container and surroundings with water spray mist.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Electrolyte may leak if the battery casing is damaged.

When storing damaged Li-ion batteries, please note that a thermal reaction may still occur after days. Therefore, store in a safe place (e.g. in a metal box with a sand bed without flammable materials in the vicinity).

Electrolyte traces can be absorbed with dry household paper. Avoid direct skin contact by wearing suitable protective gloves.

Personal protective equipment adapted to the situation should be used (suitable protective gloves, protective clothing, face protection, breathing protection).

6.2 Environmental measures

Penetration of the product into the sewage system, in watercourses or in the soil should be prevented. Prevent expansion into the area (e.g. by containment or oil booms).

6.3 Methods and materials for containment and cleaning up

Electrolyte may leak if the battery casing is damaged. Pack the batteries airtight in a plastic bag, add dry sand, chalk powder (CaCO3) or vermiculite. Electrolyte traces can be absorbed with dry household paper.

SECTION 7: HANDLING AND STORAGE

7.1 Safety measures for safe handling

No special protective equipment is required for handling the batteries. Observe the warning notices on the battery casing and the safety instructions in the operating instructions.

Only use the recommended original batteries and chargers.

Observe the storage and transport instructions in the operating instructions.

Storage of larger quantities of Li-ion batteries should be agreed with the local authorities, fire brigade and insurance companies.

Discharged batteries are also a source of danger, as they can still cause a very high short-circuit current. Even if lithium-ion batteries give the impression of being in a discharged state, they should therefore be handled as carefully as if they were not discharged.

Avoid physical impacts / impacts
Impact and penetration of objects can damage the battery. This may cause leakage, heat generation, smoke, ignition or explosion of the battery.

Keep the batteries away from other metallic objects
such as paper clips, coins, keys, screws or other metallic objects that could cause bridging of the connection contacts. A short circuit between the battery contacts may cause burns or fire.

Liquid may leak from the battery if used incorrectly
Avoid contact with it. In case of accidental contact, rinse with water. Leaking battery fluid may cause skin irritation or burns. If the liquid gets into your eyes, seek additional medical attention.

Do not expose batteries to fire or high temperatures
If batteries are thrown into fire or exposed to temperatures above 85°C, the heat generated may cause an explosion and/or fire and injury to persons.

Do not disassemble batteries
Disassembling or altering the batteries can damage the protective devices. This may result in heat generation, smoke, ignition or explosion of the battery.

Do not immerse batteries in liquids such as water or beverages
Contact with liquids can damage the battery. This may result in heat generation, smoke, ignition or explosion of the battery.

Charge batteries only in chargers that are designed for
If a charger that is suitable for a particular type of battery is used with other batteries, there is a risk of fire.

Use batteries only with the power tools intended for this purpose Use of any other power tool may result in injury or fire.

Do not use damaged or modified batteries
Damaged or altered batteries may have unpredictable characteristics that could result in fire, explosion, or injury.

Do not use defective batteries
As soon as a battery shows abnormal characteristics such as odor, heat, discoloration or deformation, the use of the battery must be stopped immediately. Continued use of the battery may cause heat and smoke, ignition or explosion.

7.2 Conditions for safe charging considering incompatibilities

Safe storage is guaranteed in the original packaging.

The warnings on rechargeable batteries and the instructions for use must be observed and carefully followed in all cases. Only use the recommended battery types.

Lithium batteries should preferably be stored at room temperature and dry (max. 50°C). Large temperature fluctuations should be avoided. (e.g. do not store near heaters, do not expose to sunlight permanently).

SECTION 8: LIMITATION AND CONTROL OF EXPOSURE / PERSONAL SAFETY GEAR

8.1 Parameters to be monitored

Lithium-ion batteries are products (articles) from which no substances are released under normal and reasonably foreseeable conditions of use. Therefore, exposure monitoring and personal protective equipment normally are not required.

8.2 Exposure controls and monitoring

If there is a leakage of substances from the batteries, the following instructions for accident prevention must be observed when handling chemicals:

	Hand protection	Protective gloves with CE marking
	Eye protection	Tightly sealed safety goggles
	Body protection	Protective work clothing

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical characteristics

General information	Compact batteries with (plastic) coating and terminal contacts
Odor	odorless
Solvent content (VOC)	0.0%

SECTION 10: STABILITY AND REACTIVITY

10.1 Chemical stability
No decomposition if used as intended

10.2 Possible dangerous reactions No hazardous reactions known

10.3 Conditions to avoid
If a storage temperature of 60°C is exceeded, accelerated ageing and premature loss of function may occur. If the upper temperature limit (e.g. 130°C) is exceeded, there is a risk that the batteries will burst or that the pressure relief device will respond.

10.4 Incompatible materials
Avoid contact with strong oxidizing and acidic agents and conductive materials.

10.5 Hazardous decomposition products In case of fire, harmful vapors are released.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
These batteries are products (articles) from which no substances are released under normal and reasonably foreseeable conditions of use. In the event of damage, organic electrolyte and other ingredients may be released.

Primary irritant effect:

on the skin	irritates the skin and mucous membranes
on the eye	irritant effect

SECTION 12: ECOLOGICAL INFORMATION

12.6 Other adverse effects
Under normal and reasonably foreseeable conditions of use, no adverse effects on the environment are to be expected. The batteries do not contain heavy metals (such as lead, cadmium or mercury).

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment procedures

In the EU, used lithium batteries may not be disposed of in household waste and may not be mixed with other batteries of other systems, in order not to make recycling more difficult and to prevent a danger to people and the environment.

Used batteries can be returned free of charge at the point of sale or to a disposal system (industry, trade).

Lithium batteries are marked with the "symbol for separate collection" (crossed-out wheeled bin) in accordance with the European battery directive (see illustration):

To prevent short circuits and the associated heating, lithium batteries must never be stored or transported unprotected in bulk.

Suitable measures against short circuits are e.g:

- Placing the batteries in their original packaging, original device or in a plastic bag
- Masking the poles
- Embedding in dry sand

European Waste Catalogue

16 06 05	other batteries and accumulators
20 01 34	accumulators and accumulators other than those mentioned in 20 01 33

SECTION 14: TRANSPORT INFORMATION

The commercial transport of lithium-ion batteries is subject to the law on dangerous goods. Transport preparations and transport must only be carried out by persons who have been trained accordingly.

Transport regulations:
All lithium batteries mentioned in the preliminary remark comply with special provision 188 in chapter 3.3 of ADR 2013 and the UN Recommendations on the transport of dangerous goods, Manual of tests and criteria, ST/SG/AC.10/11/Rev. 6/Amendment 1.

14.1 UN numbers

UN3480	Lithium-ion batteries
UN 3481	Lithium-ion batteries packed in or with equipment

14.2 UN proper shipping name

UN 3480:	LITHIUM-ION BATTERIES
UN 3481:	LITHIUM-ION BATTERIES IN EQUIPMENT (i.e. in the battery operated product inserted) or LITHIUM-ION BATTERY, WITH EQUIPMENT PACKED (i.e., together with the battery-powered product packed)

14.3 Transport hazard class
Class 9

14.4 Packaging group

ADR, RID, IMDG code:
Special provisions (≤ 100 Wh): 188, 230b, 376, 377
Packaging instructions: P903, P908, P909
EmS: F-A, S-I Stowage category A

ICAO, IATA-DGR
Special provisions: A88, A99, A154, A164, A183
Packaging instructions (≤ 100 Wh): 965 IB, 965 II, 966 II, 967 II

Environmental hazards
No

All modes of transport
Defective or damaged batteries are subject to stricter regulations, which go as far as a complete ban on transport. A general transport ban applies to the air transport mode (IATA special provision A154).

For the transport of used - but not damaged - rechargeable batteries, however, please also refer to the corresponding special regulations. Waste batteries and rechargeable batteries sent for recycling or disposal are prohibited in air transport (IATA special provision A 183). Exceptions must be approved in advance by the competent national authority of the state of departure and the state of the air carrier.

SECTION 15: REGULATORY INFORMATION

15.1 Regulations on safety, health and environmental protection / specific Legislation applicable to the substance or mixture

European regulations
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)

Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators

Council Directive 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations

Water hazard class: not applicable

SECTION 16: OTHER INFORMATION

The information is based on the current state of our knowledge and experience. The safety information describes products regarding safety requirements. The information does not have the meaning of warranted properties.

Abbreviations and acronyms:

RID	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO	International Civil Aviation Organisation
ADR	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG	International Maritime Code for Dangerous Goods
IATA	International Air Transport Association
CLP	Classification, labelling and packaging of substances and mixtures
CAS	Chemical Abstracts Service (division of the American Chemical Society)